Cambium Networks™

QUICK START GUIDE

cnMaestro c4000 Controller

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Introduction

Thank you for purchasing Cambium Networks cnMaestro c4000 Controller. This Quick Start Guide is provided to assist operators in acquiring a high-level understanding of the cnMaestro c4000 Controller hardware, installation methods, initial login procedures, and safety/warranty information.

Product Description

cnMaestro c4000 Controller is On-Premises hardware appliance for onboarding, management and monitoring of Cambium products and can be used as a GRE tunnel concentrator for cnPilot device.

Product Safety information

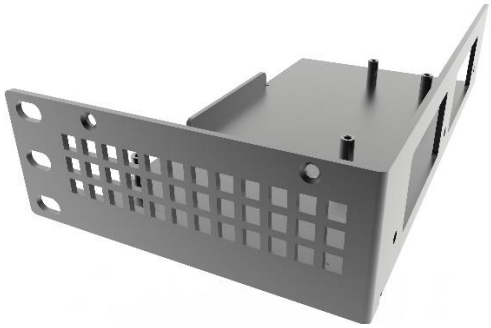
Warning

To prevent loss of life or physical injury, observe the following safety guidelines. In no event shall Cambium Networks be liable for any injury or damage caused during the installation of cnMaestro c4000 Controller platform. Ensure that only qualified personnel install.

Electrical Safety Information

1. Compliance with manufacturer's label for voltage, frequency, and current requirements. Connecting to a different power source than those specified may result in improper operation, damage to equipment or pose a fire hazard if the limitations are not followed.
2. There are no serviceable parts inside this equipment. Service should be provided only by a qualified service technician.
3. This equipment is provided with a detachable power cord which has an integral safety ground wire intended for connection to a grounded safety outlet.
   a. Do not substitute the power cord with one that is not the provided approved type. Never use an adapter plug to connect to a 2-wire outlet as this will defeat the continuity of the grounding wire.
   b. The equipment requires the use of the ground wire as a part of the safety certification, modification or misuse can provide a shock hazard that can result in serious injury or death.
   c. Contact a qualified electrician or the manufacturer if there are questions about the installation prior to connecting the equipment.
   d. Protective earthing is provided by Listed AC adapter. Building installation shall provide appropriate short-circuit backup protection.
   e. Protective bonding must be installed in accordance with local national wiring rules and regulations.

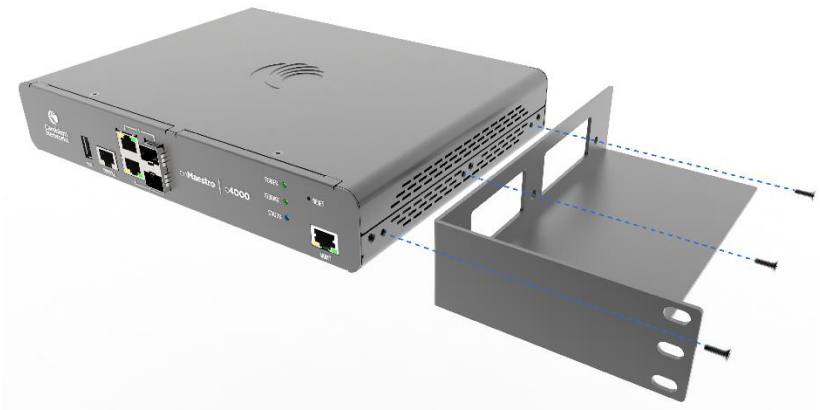
Package Contents

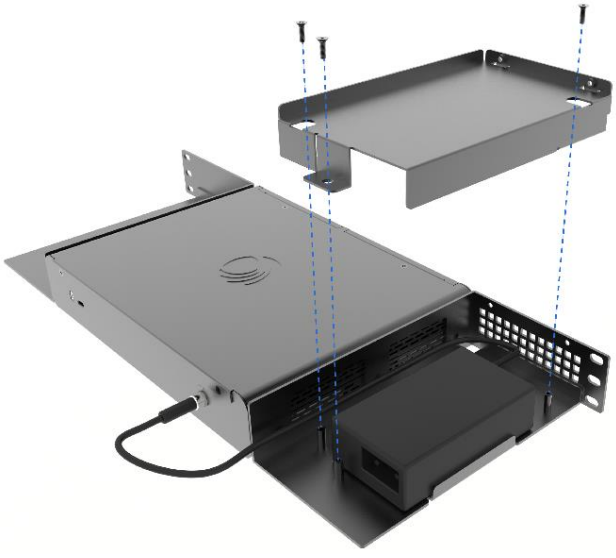
SL No.	Item	Image
1	c4000 Controller	
2	Adapter Top cover	
3	Left side Mounting Bracket	
4	Right Side Mounting Bracket	
5	Console Cable	

SL No.	Item	Image
6	Ethernet Cable	
7	M2 Screws (Qty. 11)	
8	M3 CSK Screw (Qty.12)	
9	Power Adapter	

Mounting Instructions

Rack Mount

Step 1: Fix the right-side mounting bracket to cnMaestro c4000 Controller using 3x M2 screws.	

Step 2: Fix the Left-side mounting bracket to cnMaestro c4000 Controller using 3x M2 screws.	
Step 3: Place the power adapter on the Left-side mounting bracket.	
Step 4: Place the adapter top cover on the Left-side mounting bracket holding the power adaptor inside by using 3x M2 screws from the top.	

Step 5: Using 2x M2 screws, assemble the adaptor top cover to the Left-side mounting bracket from the front as shown in figure.	
Step 6: If you are using a universal 19-inch cabinet, snap a TAR M6 square cage nut into the top and bottom holes of the location where you will be installing the rail plate as shown.	

cnMaestro c4000 Controller Hardware Overview

cnMaestro c4000 Controller interfaces overview

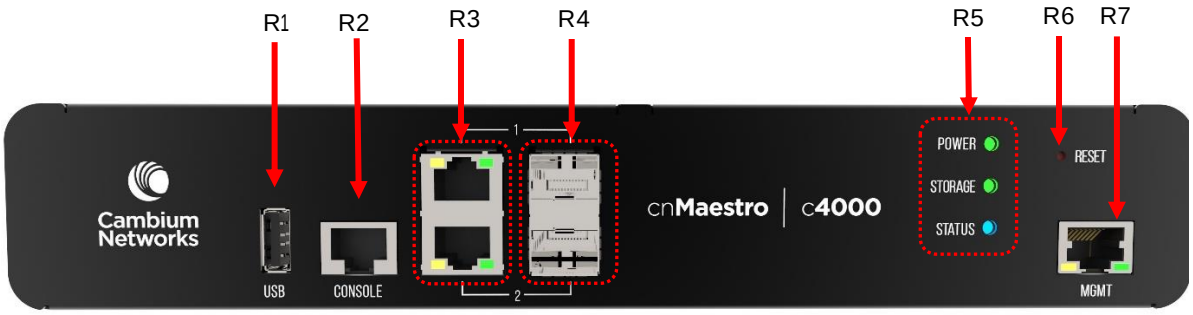


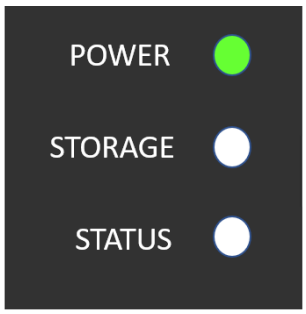
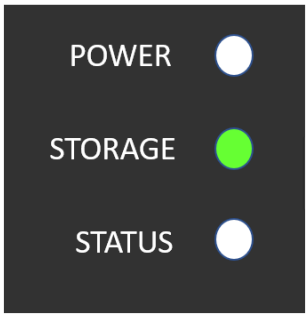
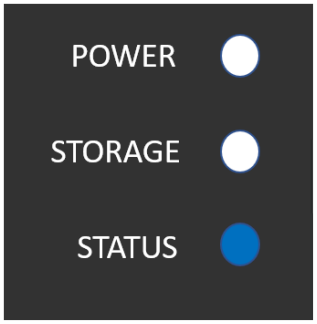
Figure 1: cnMaestro c4000 Controller Front View

Item	Component	Qty
R1	USB 2.0 Type A Port	1
R2	Console Port	1
R3	1 Gigabit Ethernet Interfaces (Data Port)	2
R4	1 Gigabit SFP Ports (Data Port)	2
R5	Multi-purpose LEDs	3
R6	Reset Button	1
R7	Management Port	1

Figure 2: cnMaestro c4000 Controller Back View

Item	Component	Qty
R8	Kensington Lock	1
R9	DC Power In	1

cnMaestro c4000 Controller LED details

LED Name	LED	Color	Behaviour	Status Indication
Power		Green	Steady On	Power On
Storage		Green	Blinking	Represents Storage Activity
Status		Amber	Steady On	Device is booting state
		Blue	Steady On	Successful boot of device
		Blue and Amber	Blinking	Factory Reset in progress

cnMaestro c4000 Controller Reset

Action	Behaviour
Press and Release	Reboot
Press and Hold for 10 seconds	Factory reset

cnMaestro c4000 Controller Specifications

Category	Specification
Power Supply	115vac/230VAC
MTBF (Hours)	320,415 hours (GB, 30C)
Weight	2.3 kg
Dimensions	255mm x 191.2 mm x 44 mm
CPU Speed	C2758, 2.4GHz
Rack Mountable	Yes
Temperature Ranges	0 – 40C
Operating Humidity	95%@40C
Storage Temperature	-20°C to – 80°C
Memory	8GB
CPU Cores	8

Initial Setup and Software Upgrade

Power ON the cnMaestro c4000 Controller. POWER LED will glow after powering ON and wait for 2 minutes to boot up the device properly.

- The controller comes with a default factory image.
- To upgrade the controller with latest software image, setup the management port connectivity as shown below:

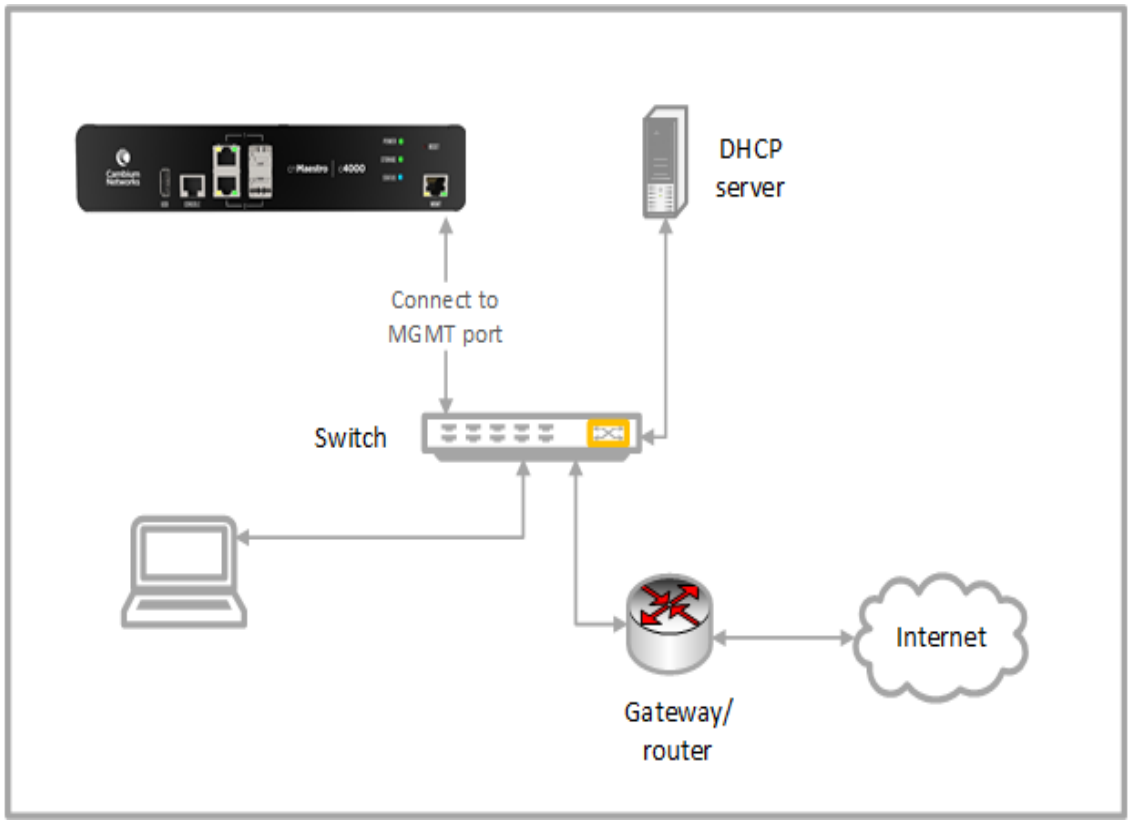


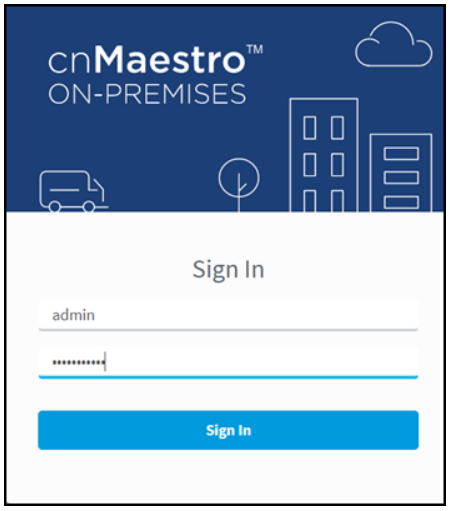
Figure 3: Installing cnMaestro c4000 Controller

Login to Web UI

- Open the browser and login to controller UI as http(s)://<IP address> with default credentials as below:
  - Username: admin
  - Password: admin

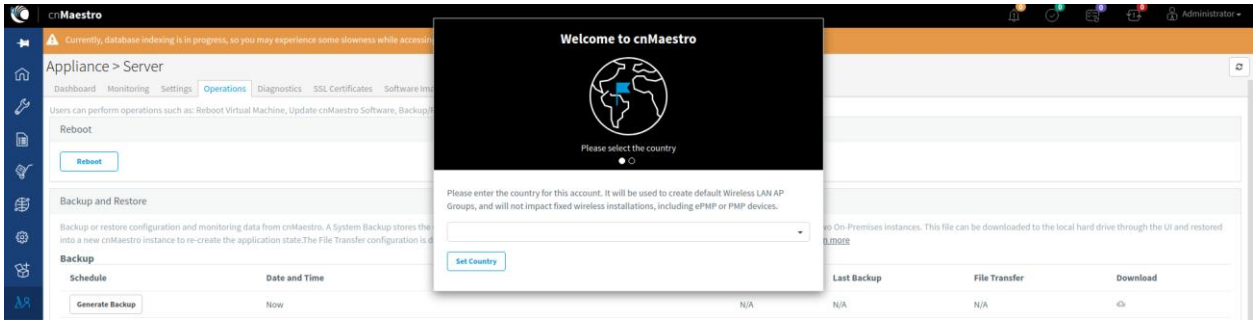
Note

cnMaestro c4000 Controller will try to get a DHCP IP. In case of DHCP failure the default fallback IP is 192.168.0.1.



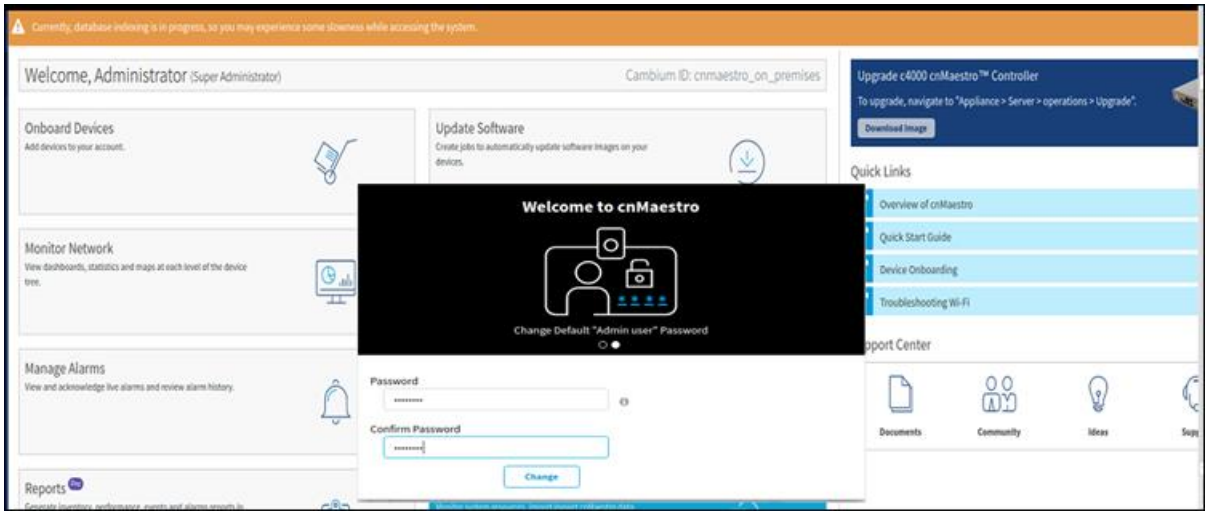
Configure country

After login a pop-up window will appear to configure country. This is mandatory to continue configuring system as per the requirements.



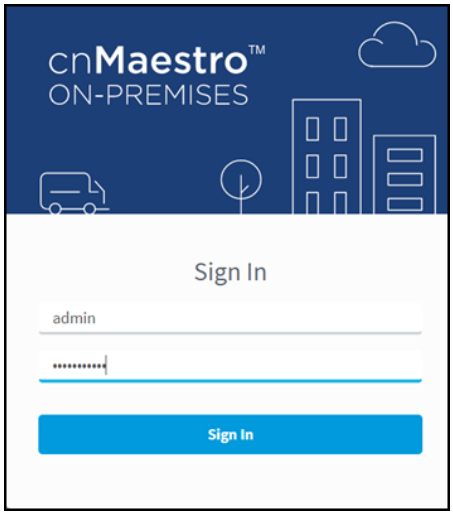
Change default password

After login, a window will appear prompting the user to change default password.



Login to web UI with new password

It will redirect to login page again. Login with default username and new password.



Default software version

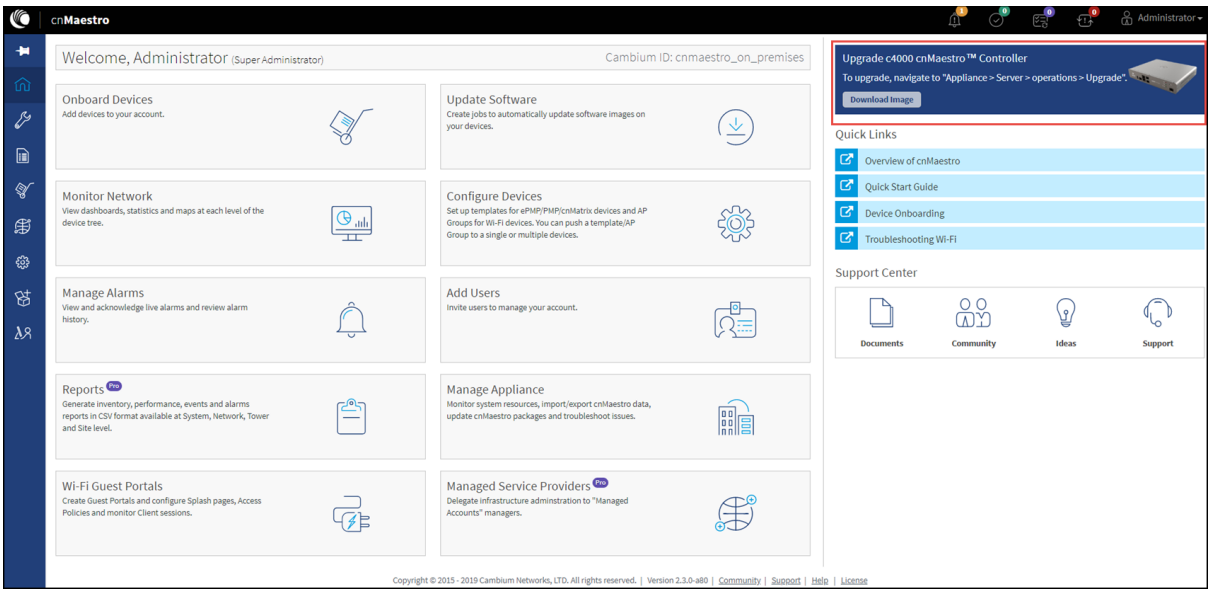
> **Note**
>
> The default software version on the cnMaestro c4000 controller is 1.0-a30.

To view the default software version in the UI:

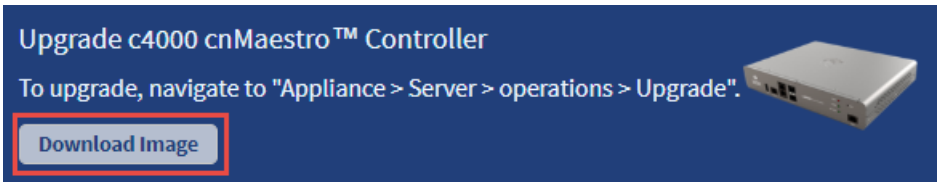
Navigate to Appliance > Server > Operations page. You can view the active partition of controller showing version as 1.0-a30 on the bottom of the page.

Software upgrade

1. Navigate to the home page of cnMaestro c4000 controller UI.

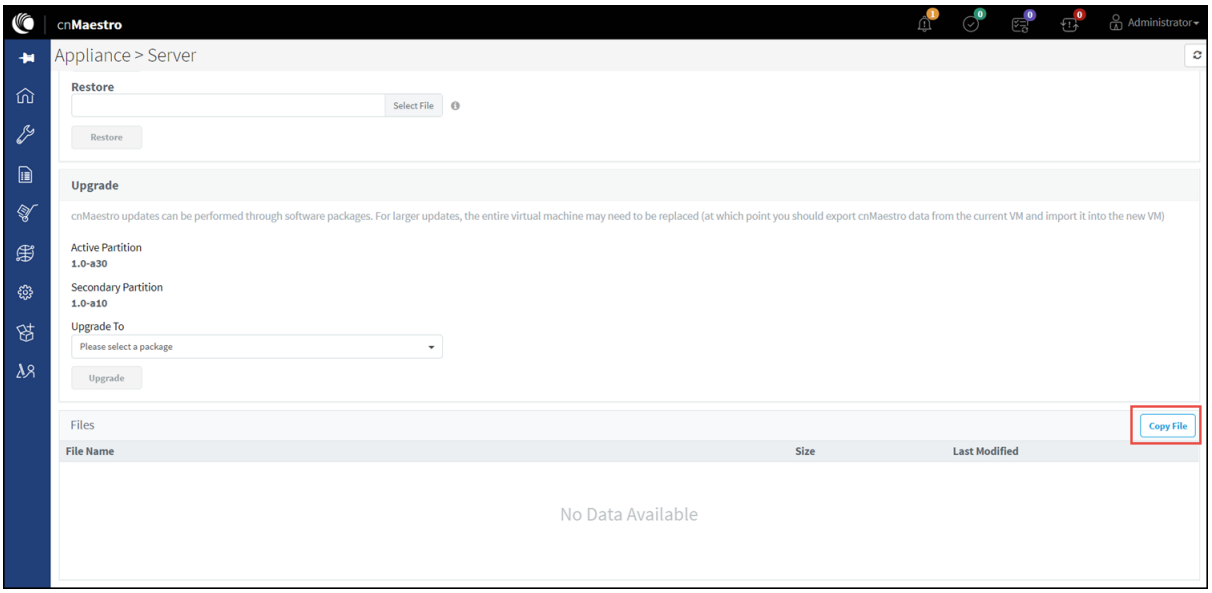


2. Click on Download Image button.



It directs user to Cambium Support page. The user can login to the Support Site and download the cnMaestro c4000 Controller image.

3. Once the download is complete, navigate to Appliance > Server > Operations page in the UI.
4. Navigate to File and click Copy File button.

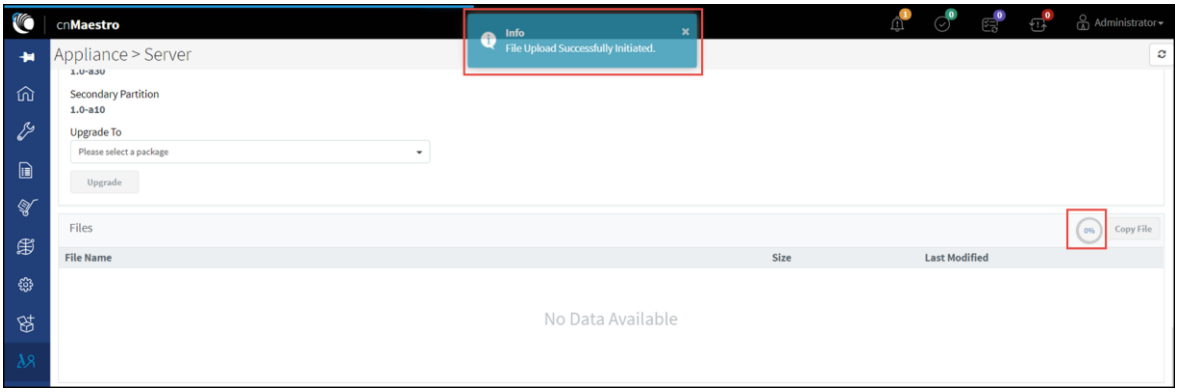


5. Copy File window will pop-up. Choose Local radio button.

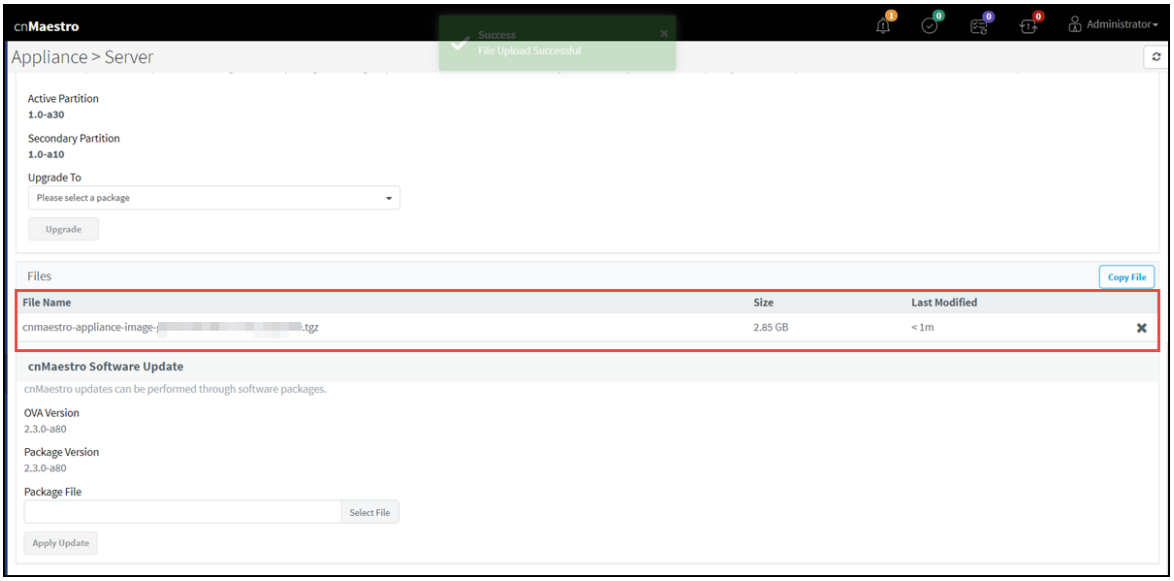
6. Click Select File to browse and select the downloaded cnMaestro c4000 Controller image.

7. Click Upload button to upload the selected cnMaestro c4000 Controller image.

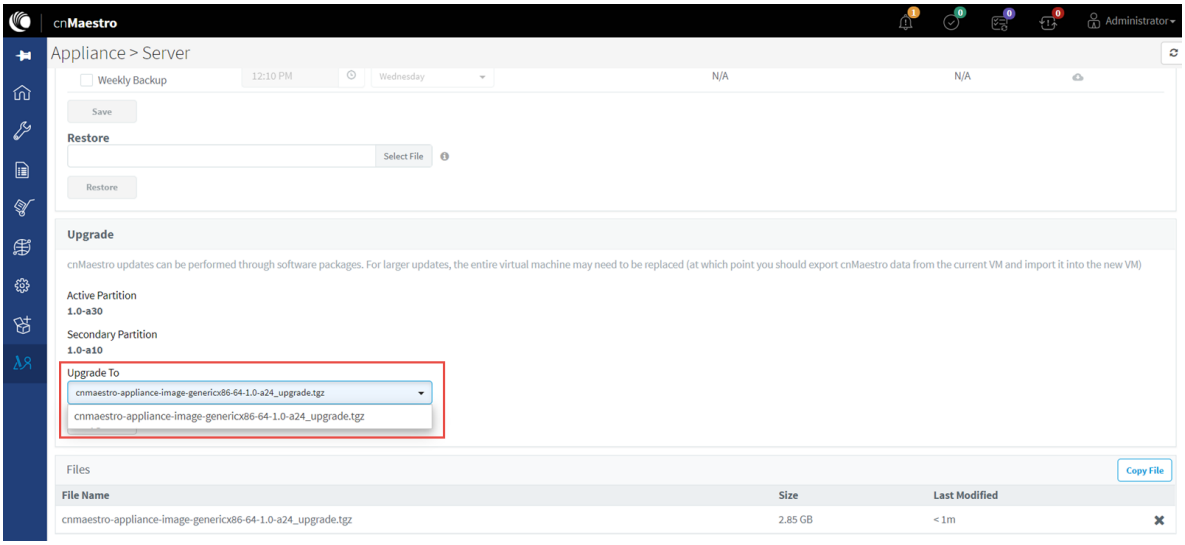
   You can view the status of upload in the UI as displayed below:



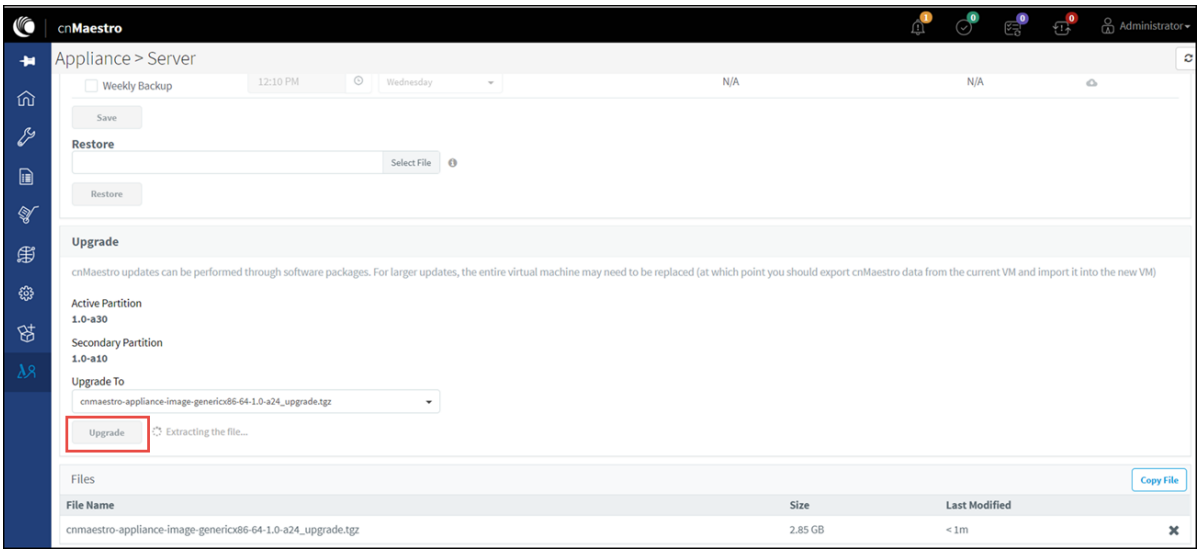
8. Once the upload is successful, the cnMaestro c4000 Controller image file will be displayed under File Name in the UI.



9. Under Upgrade, choose the uploaded cnMaestro c4000 Controller image from the drop-down list.

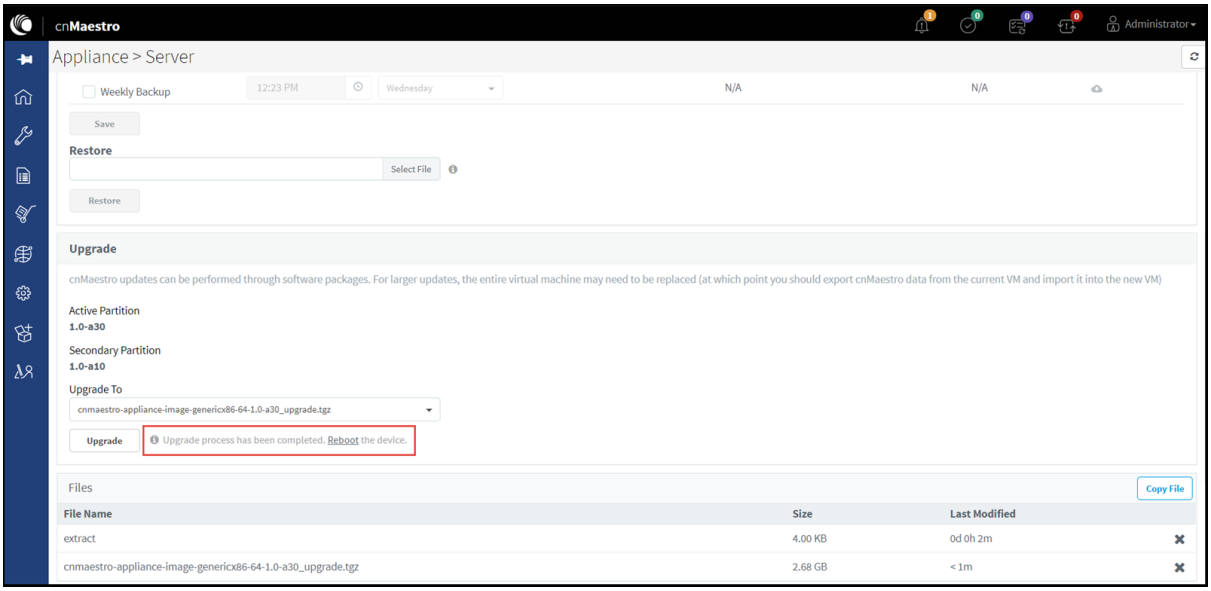


10. Click Upgrade button.



11. You can also view the status of upgrade as shown below:

12. Once the upgrade is successful, click on the link next to Upgrade button for rebooting the device.


cnMaestro
Administrator
Appliance > Server
Weekly Backup
12:23 PM
Wednesday
N/A
N/A
Save
Restore
Select File
Restore
Upgrade
cnMaestro updates can be performed through software packages. For larger updates, the entire virtual machine may need to be replaced (at which point you should export cnMaestro data from the current VM and import it into the new VM)
Active Partition
1.0-a30
Secondary Partition
1.0-a10
Upgrade To
cnmaestro-appliance-image-genericx86-64-1.0-a30_upgrade.tgz
Upgrade
Upgrade process has been completed. Reboot the device.
Files
Copy File
File Name
Size
Last Modified
extract
4.00 KB
0d 0h 2m
cnmaestro-appliance-image-genericx86-64-1.0-a30_upgrade.tgz
2.68 GB
< 1m

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